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      .       .       .       .       .
1  CGGAGGCAGGGAGTGAGGAGCGAGCGGAGTCGCGTGCGCCGGCGCGAGCTCCGGGTCCGCC 60

      .       .       .       .       .
61 CCAGCCCCAGCCGGGGGCCTGTGGCGGGGGAGGAGCTGTGCGTCCGCGACCCGTCGGGAT 120

      .       .       .       .       .
121 CGCAGCTGCTCGGCCGGAGTGCACGGGCCGAGTCTGCGCGACTACCCACGCGTGACAGGT 180

      .       .       .       .       .
181 CCCTGAATGAGAAGGAGCTGACAGCAGCTGAATTCATCTTCTCTGTGTGTCTGGGGAGCA 240

      .       .       .       .       .
241 GGGCTACACGGCCCAGGTGGCATCAATGCCGAAGAACAGCAAAGTGACCCAGCGTGAGCA 300
      1                M P K N S K V T Q R E H 12

      .       .       .       .       .
301 CAGCAGTGAGCATGTCACTGAGTCCGTGGCCGACCTGCTGGCCCTCGAGGAGCCTGTGGA 360
      13   S S E H V T E S V A D L L A L E E P V D 32

      .       .       .       .       .
361 CTATAAGCAGAGTGTACTGAATGTGGCTGGTGAGGCAGGCGGCAAGCAGAAGGCGGTGGA 420
      33   Y K Q S V L N V A G E A G G K Q K A V E 52

      .       .       .       .       .
421 GGAGGAGCTGGATGCAGAGGACCGGCCGGCCTGGAACAGTAAGCTGCAGTACATCCTGGC 480
      53   E E L D A E D R P A W N S K L Q Y I L A 72

      .       .       .       .       .
481 CCAGATTGGCTTCTCTGTGGGCCTCGGCAACATCTGGAGGTTCCCCTACCTGTGCCAGAA 540
      73   Q I G F S V G L G N I W R F P Y L C Q K 92

      .       .       .       .       .
541 AAATGGAGGAGGTGCTTACCTGGTGCCCTACCTGGTGCTGCTGATCATCATCGGGATCCC 600
      93   N G G G A Y L V P Y L V L L I I I G I P 112

      .       .       .       .       .
601 CCTCTTCTTCCTGGAGCTGGCTGTGGGTCAGAGGATCCGCCGCGGAAGCATCGGTGTGTG 660
      113  L F F L E L A V G Q R I R R G S I G V W 132

      .       .       .       .       .
661 GCACTATATATGTCCCCGCCTGGGGGGGATCGGCTTCTCCAGCTGCATAGTCTGTCTCTT 720
      133  H Y I C P R L G G I G F S S C I V C L F 152

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FIG. 1A

721 TGTGGGGCTGTATTATAATGTGATCATCGGGTGGAGCATCTTCTATTTCTTCAAGTCCTT 780
153 V G L Y Y N V I I G W S I F Y F F K S F 172

781 CCAGTACCCGCTGCCCTGGAGTGAATGTCCTGTCGTCAGGAATGGGAGCGTCGCAGTGGT 840
173 Q Y P L P W S E C P V V R N G S V A V V 192

841 GGAGGCAGAGTGTGAAAAGAGCTCAGCCACTACCTACTTCTGGTACCGAGAGGCTTTGGA 900
193 E A E C E K S S A T T Y F W Y R E A L D 212

901 CATCTCTGACTCCATCTCGGAGAGTGGGGGCCTCAACTGGAAGATGACCCTGTGCCTCCT 960
213 I S D S I S E S G G L N W K M T L C L L 232

961 CGTGGTCTGGAGCATCGGGGGGATGGCTGTCGGTAAGGGCATCCAGTCCTCGGGGAAGGT 1020
233 V V W S I G G M A V G K G I Q S S G K V 252

1021 GATGTATTTAGCTCCCTCTTCCCCTACGTGGTGTGGCCTGCTTCCTGGTCCGGGGGTT 1080
253 M Y F S S L F P Y V V L A C F L V R G L 272

1081 GTTGTTCGAGGGGCAGTTGATGGCATCCTACACATGTTCACTCCCAAGCTGGTCAAGAT 1140
273 L L R G A V D G I L H M F T P K L V K M 292

1141 GCTGGACCCCCAGGTGTGGCGGGAGGTAGCTACCCAGGTCTTCTTTGGCTTGGGTCTGGG 1200
293 L D P Q V W R E V A T Q V F F G L G L G 312

1201 CTTTGGTGGTGTCAATTGTCTTCTCCAGTTACAATAAGCAGGACAACAAGTCCCACTTCGA 1260
313 F G G V I V F S S Y N K Q D N N C H F D 332

1261 TGGCGCCCTGGTGTCTTCATCAACTTCTTCACGTGAGTGTGGCCACCCTCGTGGTGT 1320
333 G A L V S F I N F F T S V L A T L V V F 352

1321 TGTGTGTTTTGGGCTTCAAGGCCAACATCATGAATGAGAAGTGTGTGGTCGAGAATGCTGA 1380
353 V V L G F K A N I M N E K C V V E N A E 372

FIG. 1B

1381 GAAAATCCTAGGGTACCTTAACACCAACGTCCTGAGCCGGGACCTCATCCCACCCACGT 1440
373 K I L G Y L N T N V L S R D L I P P H V 392

1441 CAACTTCTCCACCTGACCACAAAGGACTACATGGAGATGGACAATGTCATCATGACCGT 1500
393 N F S H L T T K D Y M E M D N V I M T V 412

1501 GAAGGAGGACCAGTTCTCAGCCCTGGGCCTTGACCCCTGCCTTCTGGAGGACGAGCTGGA 1560
413 K E D Q F S A L G L D P C L L E D E L D 432

1561 CAAGTCCGTGCAGGGCACAGGCCTGGCCTTCATCGCCTTCACTGAGGCCATGACGCACTT 1620
433 K S V Q G T G L A F I A F T E A M T H F 452

1621 CCCCACCTCCCCGTTCTGGTCCGTCATGTTCTTCTTGATGCTTATCAACCTGGGCCTGGG 1680
453 P T S P F W S V M F F L M L I N L G L G 472

1681 CAGCATGATCGGGACCATGGCAGGCATCACCACGCCCATCATCGACACCTCCAAGGTGCC 1740
473 S M I G T M A G I T T P I I D T S K V P 492

1741 CAAGGAGATGTTACAGTGGGCTGCTGTGTCTTTACATTCTCGTGGGACTGTTGTTCTGT 1800
493 K E M F T V G C C V F T F L V G L L F V 512

1801 CCAGCGCTCCGGAAGTACTTTGTCAACATGTTGATGACTACTCAGCCACGCTGCCACT 1860
513 Q R S G N Y F V T M F D D Y S A T L P L 532

1861 CACTCTCATCGTCATCCTTGAGAACATCGCTGTGGCCTGGATTTATGGACCCAAGAAGTT 1920
533 T L I V I L E N I A V A W I Y G P K K F 552

1921 CATGCAGGAGCTGACGGAGATGCTGGGCTTCCGCCCCTACCGCTTCTATTTCTACATGTG 1980
553 M Q E L T E M L G F R P Y R F Y F Y M W 572

1981 GAAGTTCGTGTCTCCACTATGCATGGCTGTGCTCACCACAGCCAGCATCATCCAGCTGGG 2040
573 K F V S P L C M A V L T T A S I I Q L G 592

FIG. 1C

2041 GGTCACGCCCCCGCCTACAGCGCCTGGATCAAGGAGGAGGCTGCCGAGCGCTACCTGTA 2100
 593 V T P P A Y S A W I K E E A A E R Y L Y 612
 2101 TTTCCCCAACTGGCCCATGGCACTCCTGATCACCTCATCGTCGTGGCGACGCTGCCCAT 2160
 613 F P N W P M A L L I T L I V V A T L P I 632
 2161 CCCTGTGGTGTTCGTCCTGCGGCACTTCCACCTGCTCTCTGATGGCTCCAACACCCTCTC 2220
 633 P V V F V L R H F H L L S D G S N T L S 652
 2221 CGTGTCTTACAAGAAGGCCCGCATGATGAAGGACATCTCCAACCTGGAGGAGAACGATGA 2280
 653 V S Y K K A R M M K D I S N L E E N D E 672
 2281 GACCCGCTTCATCCTCAGCAAGGTGCCAGTGAGGCACCTTCCCCCATGCCCACTCACCG 2340
 673 T R F I L S K V P S E A P S P M P T H R 692
 2341 TTCCTATCTGGGGCCCCGGCAGCACATCACCCCTGGAGACCAGCTGGAACCCCAATGGACC 2400
 693 S Y L G P G S T S P L E T S W N P N G P 712
 2401 CTATGGGCGCGGCTACCTGCTGGCCAGCACCCCTGAGTCTGAGCTGTGACCACTGCCCAA 2460
 713 Y G R G Y L L A S T P E S E L * 728
 2461 GCCCATGCCCGCTCTCCCCCACC 2485

FIG. 1D

FILE

2290 2310 2330
AGACCCGCTTCATCCTCAGCAAGGTGCCCAGTGAGGCACCTTCCCCCATGCCCACTCACC
T R F I L S K V P S E A P S P M P T H R
2350 2370 2390
GTTCCCTATCTGGGGCCCGCAGCACATCACCCCTGGAGACCAGCTGGAAACCCCAATGGAC
S Y L G P G S T S P L E T S W N P N G P
2410 2430 2450
CCTATGGCGCGGCTACCTGCTGGCCAGCACCCCTGAGTCTGAGCTGTGACCACCTGCCCA
Y G R G G Y L L A S T P E S E L *
2470
AGCCCATGCCCGCTCTCCCCCACC